

Model No. ► UB1102, UB1103

Description ► Blower

CONCEPT AND MAIN APPLICATIONS

Models UB1102, UB1103 Blowers are successors of UB1100, UB1101.

Their output air volume is 4.1m³/min. over the predecessors 2.8m³/min.

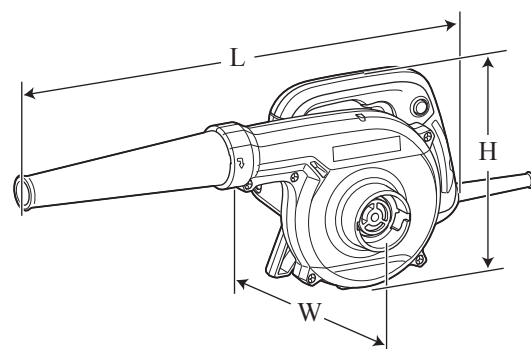
The other features are as follows:

- Ergonomic designed handle with elastomer for more comfortable and controlled operation
- Self-standing design enables stationary use, easy storage and upside-down standing

The specification difference between UB1102 and UB1103 is;

UB1102: Single speed

UB1103: Variable speed control by dial and trigger



Dimensions: mm (")	
Length (L)	479 (18-7/8)
Width (W)	185 (7-1/4)
Height (H)	178 (7)

► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output (W)
			Input	Output	
110	5.7	50/60	600	---	---
120	6.8	50/60	---	---	---
220	2.9	50/60	600	---	---
230	2.8	50/60	600	---	---
240	2.7	50/60	600	---	---

Model No.	UB1102	UB1103
No load speed: min. ⁻¹ =rpm	16,000	0 - 16,000
Max. air volume*1: m ³ /min.	4.1	0 - 4.1
Max. sealed suction: kPa	5.7	0 - 5.7
Variable speed control	No	Yes
Protection against electric shock	Double insulation	
Power supply cord: m (ft)	Australia: 0.5 (1.64), Others: 2.5 (8.2)	
Weight according to EPTA-Procedure 01/2003*2: kg (lbs)	2.0 (4.3)	

*1 Without Nozzle, Joint

*2 With Nozzle, Joint

► Standard equipment

Nozzle 1

Joint 1

Dust bag (capacity of 2L) 1 (for some countries)

Note: The standard equipment for the tool shown above may vary by country.

► Optional accessories

Dust bag assembly

Nozzle assembly

Long nozzle assembly

Flexible hose set

Anchor nozzle set (for vacuum function only)

Bending long nozzle set

► Repair

CAUTION: Repair the machine in accordance with “Instruction manual” or “Safety instructions”.

[1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R370	Ring Terminal Setting Jig	connecting Ring terminals to Brush holder
1R063	Guide Bar for fitting Field	assembling Field to Motor housing complete

[2] LUBRICATION

It is not required to lubricate, because the product has no gear mechanism to be lubricated.

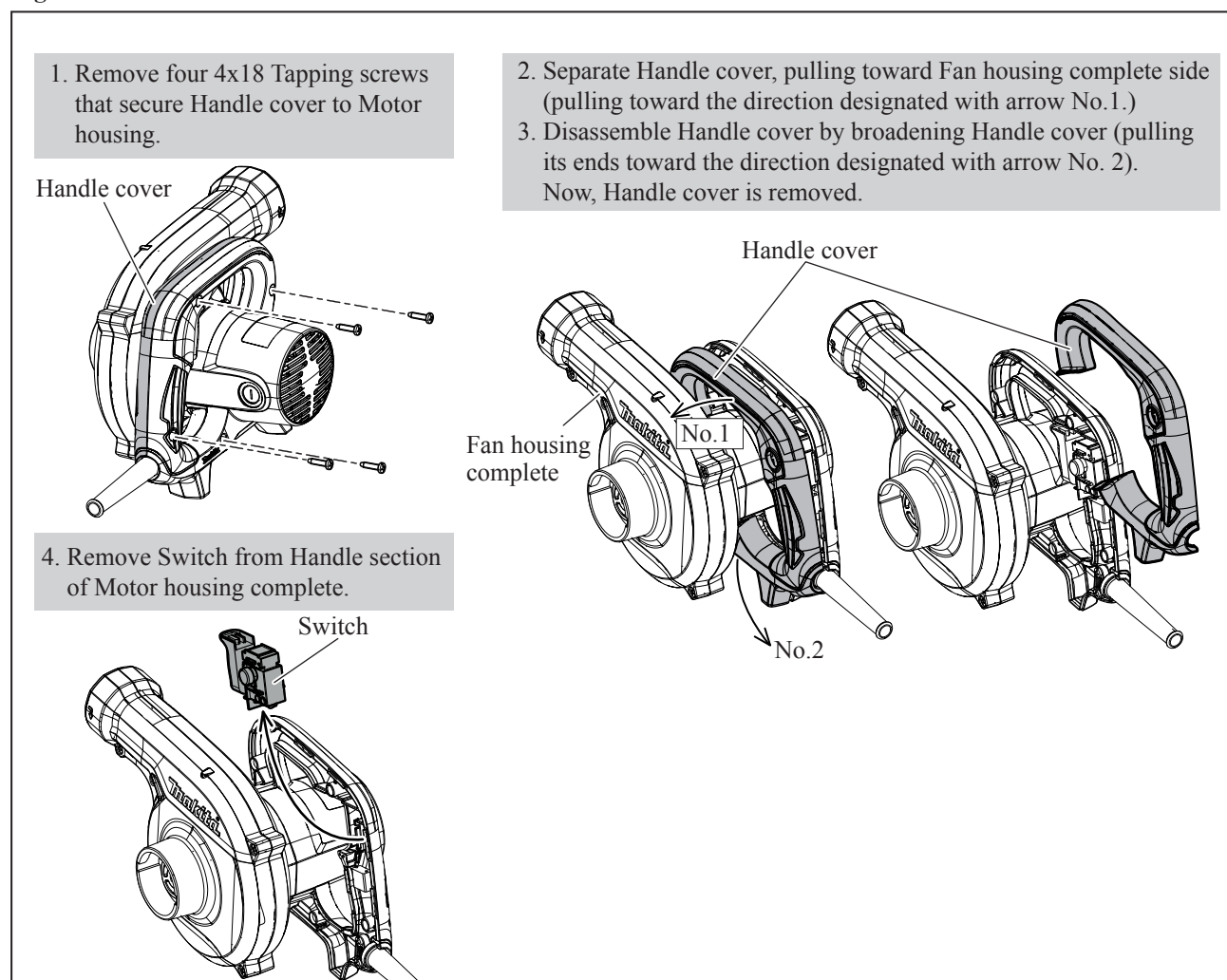
[3] DISASSEMBLY/ASSEMBLY

[3] -1. Switch

DISASSEMBLING

1. Switch can be disassembled without separating Fan housing complete section. See **Fig. 1**.

Fig. 1



ASSEMBLING

Assemble Switch by reversing the disassembly procedure. Refer to **Fig. 1**.

Note: When mounting Handle cover, be careful of the following.

- Switch and Lead wire are not pinched with Handle cover. Refer to **Fig. D-2** and **Fig. D-3**.
- There are no gaps between Handle cover and Fan housing complete.

► Repair

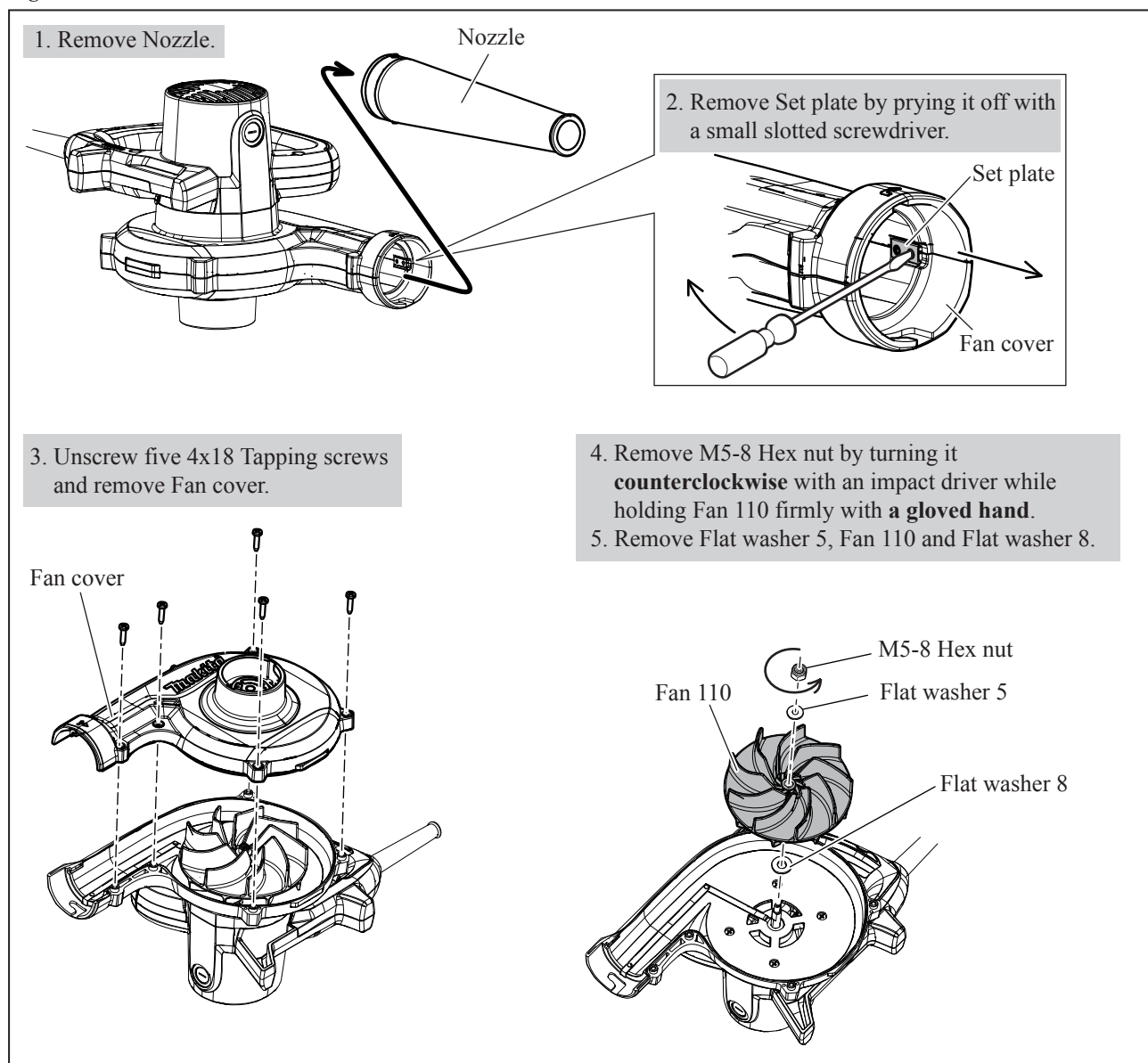
[3] DISASSEMBLY/ASSEMBLY

[3] -2. Fan Section

DISASSEMBLING

Disassemble Fan 110 as drawn in **Fig. 2**.

Fig. 2



ASSEMBLING

Assemble Fan Section by reversing the disassembly procedure. Refer to **Fig. 2**.

Note: Align the hole on Set plate with the protrusion on Fan cover, and insert Set plate by hand, then push it with a small screwdriver until it stops.

Refer to the drawing on the **top right** in **Fig. 2**.

► Repair

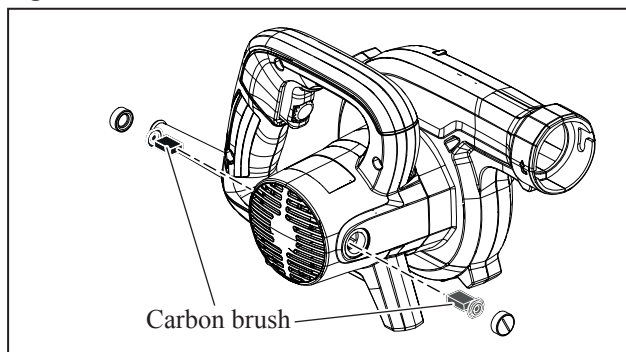
[3] DISASSEMBLY/ASSEMBLY

[3] -3. Motor Section

DISASSEMBLING

(1) Remove Carbon brush as drawn in **Fig. 3**.

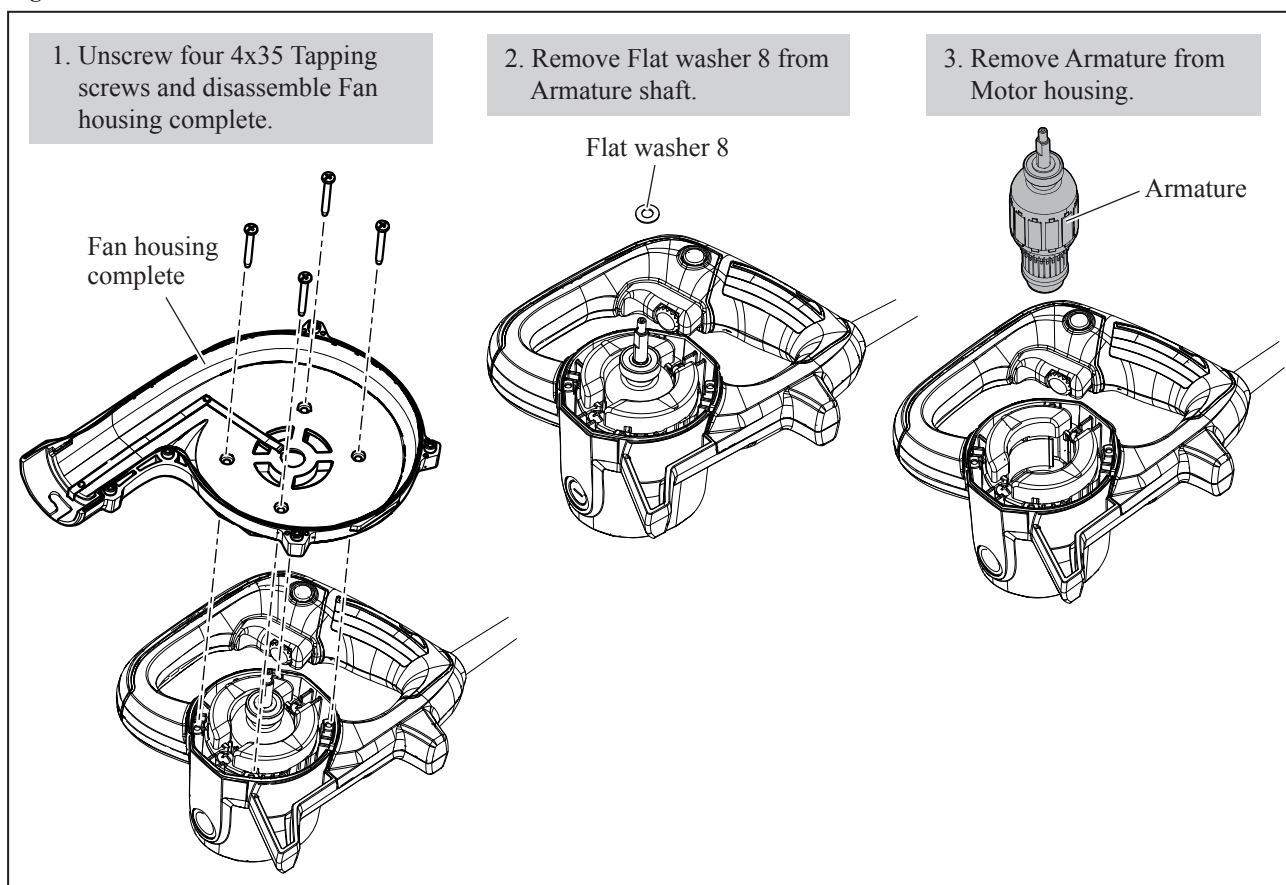
Fig. 3



(2) Disassemble Fan section as drawn in **Fig. 2**.

(3) Disassemble Armature as drawn in **Fig. 4**.

Fig. 4



► Repair

[3] DISASSEMBLY/ASSEMBLY

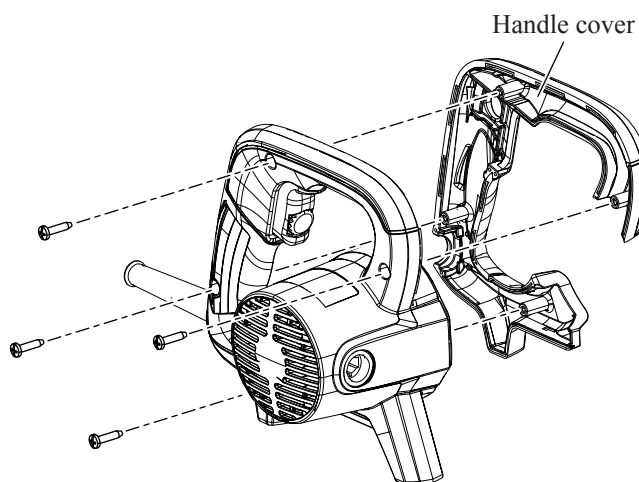
[3] -3. Motor Section (cont.)

DISASSEMBLING

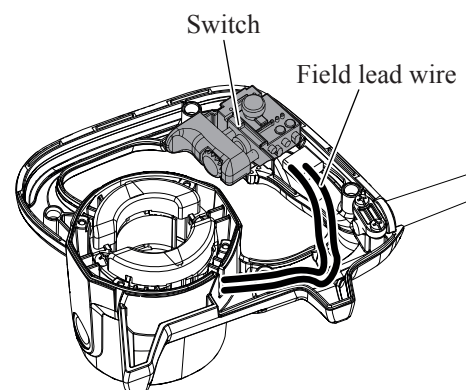
(4) Disassemble Field as drawn in **Fig. 5**.

Fig. 5

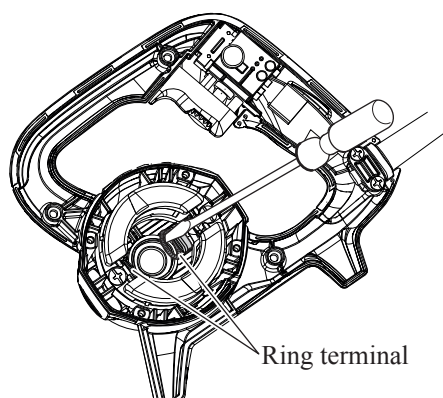
1. Unscrew four 4x18 Tapping screws and remove Handle cover.



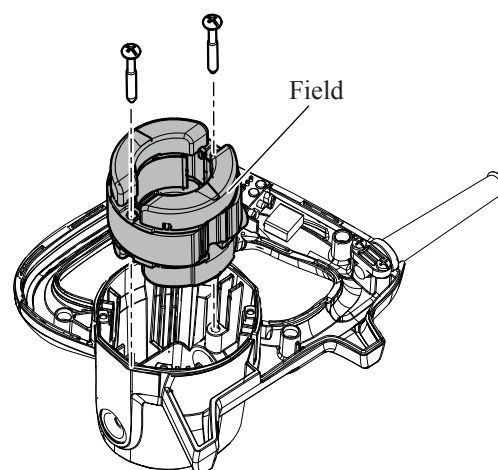
2. Disconnect Field lead wires from Switch.



3. Disconnect Ring terminals from Brush holders with a Slotted screwdriver.

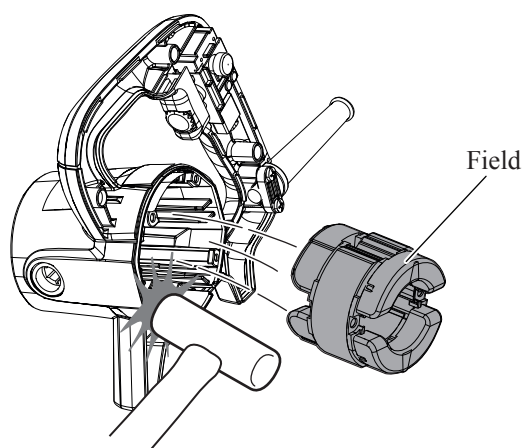


4. Unscrew two 5x40 Tapping screws and remove Field from Motor housing.



Note:

Tapping the edge of Motor housing with a plastic hammer enables Field to be removed easily.



► Repair

[3] DISASSEMBLY/ASSEMBLY

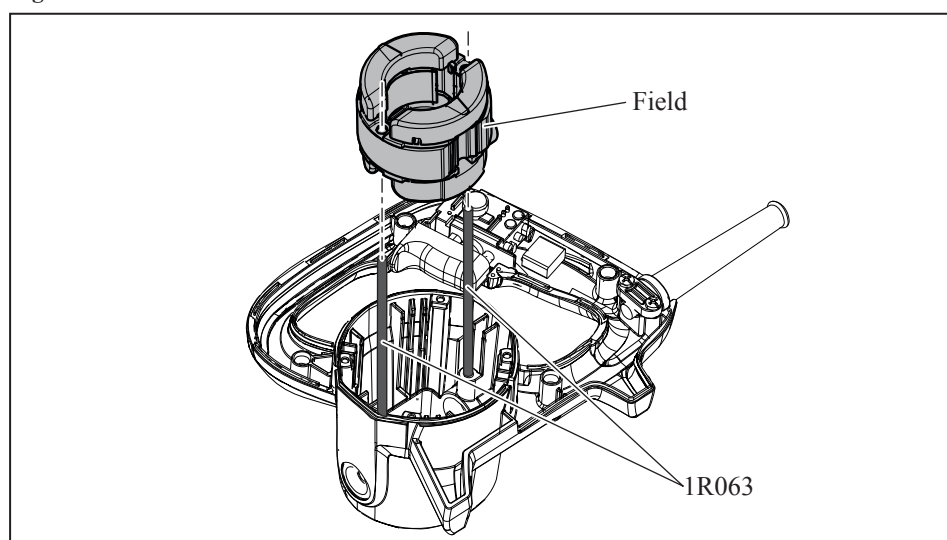
[3] -3. Motor Section (cont.)

ASSEMBLING

- (1) Assemble Field to Motor housing. Refer to the drawing on the **middle right** in **Fig. 5**. Also see **Fig. D-2** about the wiring of Field lead wires.

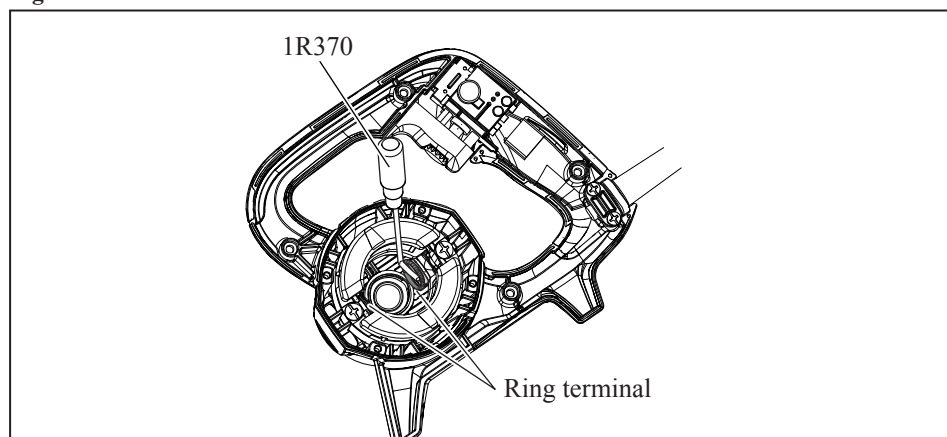
Note: Using 1R063 enables Field to be assembled easily than by hand. See **Fig. 6**.

Fig. 6



- (2) Connect Ring terminal to Brush holder using 1R370. See **Fig. 7**.

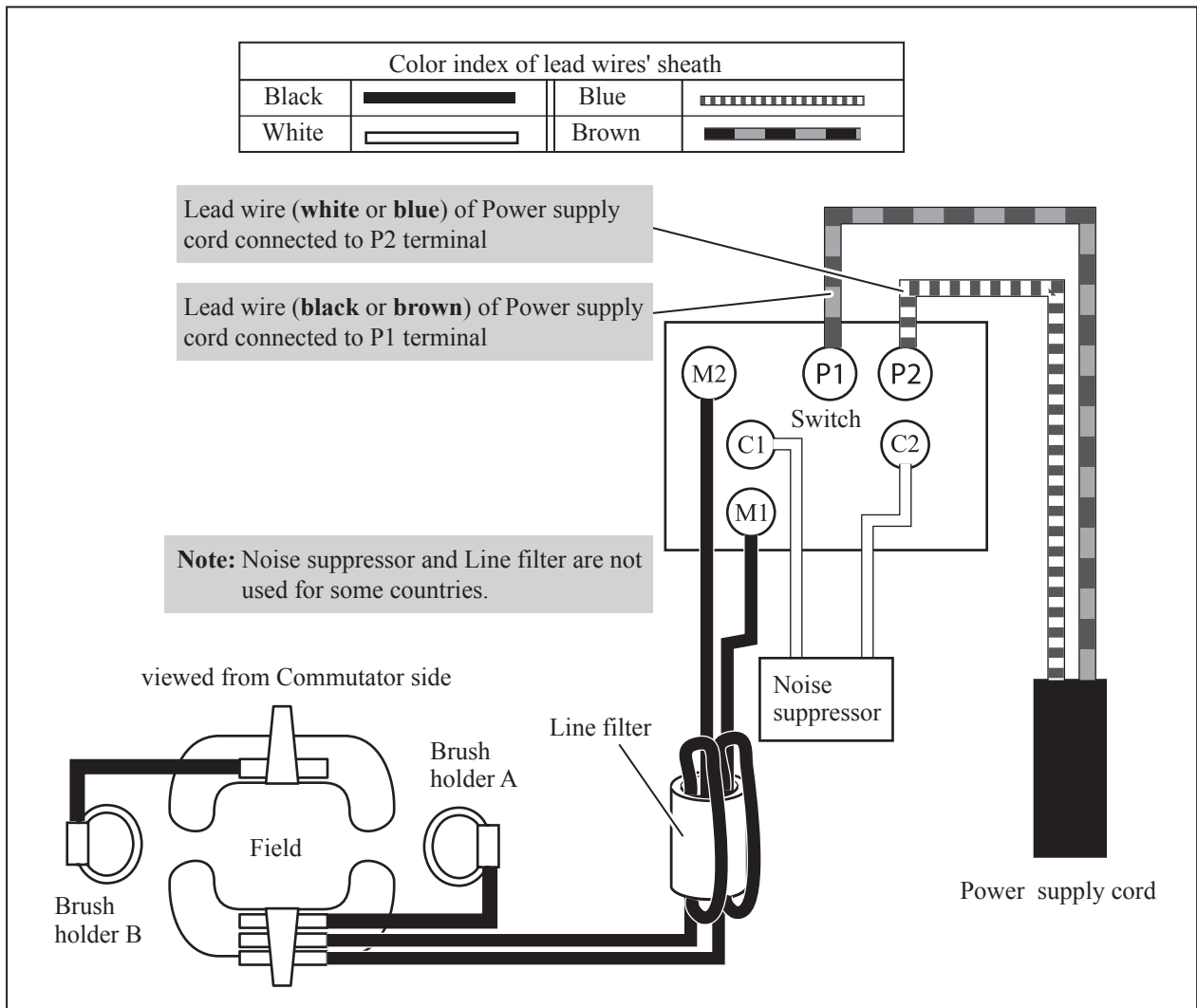
Fig. 7



- (3) Connect field lead wires to Switch and mount Handle cover to Motor housing with four 4x18 Tapping screws. Refer to the drawings on the **top left** and **right** in **Fig. 5**.
- (4) Insert Armature into Motor housing. Refer to the drawing on the **right** in **Fig. 4**.
- (5) Mount Flat washer 8 to the drive end of Armature's shaft. Refer to the drawing on the **center** in **Fig. 4**.
- (6) Assemble Fan housing complete with four 4x35 Tapping screws. Refer to the drawing on the **left** in **Fig. 4**.
- (7) Assemble Fan 110 and Fan cover. Refer to **Fig. 2**.
- And then, set Carbon brush. Refer to **Fig. 3**.

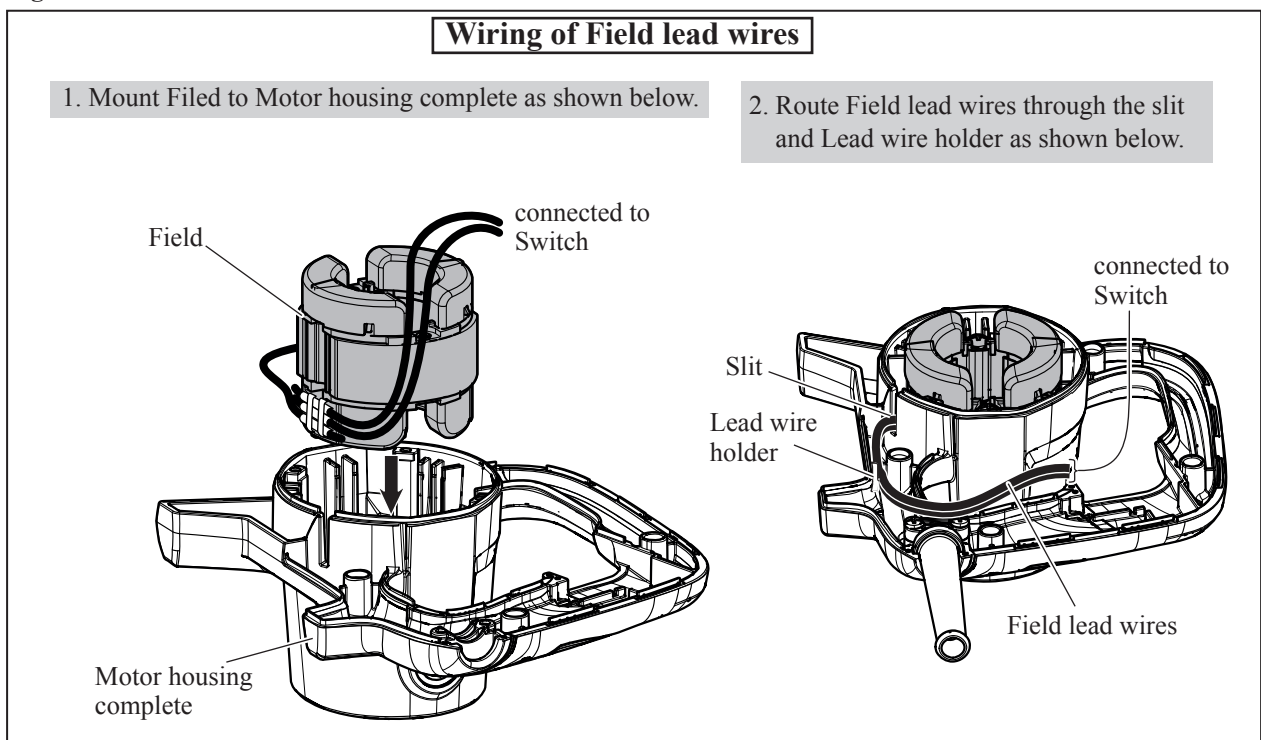
► Circuit diagram

Fig. D-1



► Wiring diagram

Fig. D-2



► Wiring diagram

Fig. D-3

